

IN THE CLAIMS:

Please amend claims 1, 3, 6-7, 9-10, 14, 16 and 20 to better claim the invention.

Please cancel claims 21-23 without prejudice.

- 1 1. (Currently Amended) A system comprising:
2 a plurality of network resources adapted to process ~~one or more~~ received block-
3 based ~~protocols~~ protocol data access requests; and
4 one or more ~~files~~ virtual servers each comprising a logical partitioning of the
5 network resources to establish an instance of a multi-protocol server configured to service
6 the block-based data access requests by converting the block-based protocol requests to
7 appropriate file system data requests in response to the block-based protocols .
- 1 2. (Original) The system of claim 1 wherein the network resources comprise net-
2 work interfaces assigned to one or more network address resources.
- 1 3. (Currently Amended) The system of claim 1 further comprising storage media
2 configured to store information as units of storage resources, the units of storage re-
3 sources allocated among each of the ~~files~~ virtual servers.
- 1 4. (Original) The system of claim 3 wherein the units of storage resources comprise
2 volumes.
- 1 5. (Original) The system of claim 3 wherein the units of storage resources comprise
2 qtrees.
- 1 6. (Currently Amended) The system of claim 3 further comprising an operating sys-
2 tem having a file system resource adapted to perform a boundary check to verify that a
3 request is allowed to access certain units of the storage resources on the storage media,

4 each ~~vfiler~~ virtual server allowed shared access to the file system and further adapted to
5 create virtual disks within the units of storage resources and wherein each of the virtual
6 disks associated with one or more of the ~~vfilers~~ virtual servers.

1 7. (Currently Amended) The system of claim 6 wherein the operating system further
2 comprises a user interface having a command set adapted to operate on virtual disks, and
3 wherein the command set executes within a context of a ~~vfiler~~ virtual server.

1 8. (Original) The system of claim 7 wherein the user interfaces comprises a com-
2 mand line interface (CLI) adapted to support the command set.

1 9. (Currently Amended) The system of claim 8 wherein the CLI comprises a lun
2 command adapted to perform operations to a virtual disk associated with the context of
3 the ~~vfiler~~ virtual server.

1 10. (Currently Amended) The system of claim 9 wherein the lun command creates a
2 logical unit number on a file system associated with the server, the logical unit number
3 being associated with the context of the ~~vfiler~~ virtual server.

1 11. (Original) The system of claim 8 wherein the CLI comprises an igroup command
2 that generates a set of file system primitive for binding an initiator group to one or more
3 initiator addresses and wherein the initiator group is associated with the context of the
4 virtual server.

1 12. (Original) The system of claim 1 wherein the block-based protocol comprises
2 iSCSI.

1 13. (Original) The system of claim 1 wherein the block-based protocol comprises
2 FCP.

1 14. (Currently Amended) The system of claim 1 further comprising a context data
2 structure provided to each virtual server ~~vfile~~, a context data structure including informa-
3 tion pertaining to a security domain of a virtual server ~~vfile~~ and enforces controlled ac-
4 cess to the allocated and shared resources.

1 15. (Original) The system of claim 1 wherein the multi-protocol server is further
2 adapted to process data access requests in response to one or more file-level protocols.

1 16. (Currently Amended) A method for implementing a virtual server ~~vfile~~, the
2 method comprising the steps of:
3 adapting a plurality of network resources to process ~~one or more~~ received block-
4 based ~~protocols~~ protocol data access requests; and
5 partitioning the network resources to establish one or more ~~vfiles~~ virtual servers,
6 each comprising an instance of a multi-protocol server configured to service the block-
7 based data access requests in response to the block-based protocols by converting the
8 block-based protocol requests to appropriate file system primitives.
9

1 17. (Currently Amended) The method of claim 16 further comprising the step of con-
2 figuring storage media to store information as units of storage resources, the units of stor-
3 age resources allocated among each of the ~~vfiles~~ virtual servers.

1 18. (Original) The method of claim 17 wherein the units of storage resources com-
2 prise volumes.

1 19. (Original) The method of claim 17 wherein the units of storage resources com-
2 prises qtrees.

1 20. (Currently Amended) A computer readable medium containing executable pro-
2 gram instructions for implementing a virtual server ~~vfile~~, the executable program in-
3 structions comprising program instructions for:
4 adapting a plurality of network resources to process ~~one or more~~ received block-
5 based data access requests ~~protocols~~ ; and
6 partitioning the network resources to establish one or more virtual servers ~~vfiles~~
7 each comprising an instance of a multi-protocol server configured to service the block-
8 based data access requests by converting the block-based protocol requests to appropriate
9 file system data access requests ~~in response to the block-based protocols~~ .

1 21-23 (Cancelled)

Please add new claims 24 et seq.,

- 1 24. (New) A method, comprising:
2 receiving a block-based data access request from a client;
3 forwarding the request to a virtual server;
4 converting the received block-based data access request to a file system data ac-
5 cess request;
6 servicing the file system data access request to generate a response; and
7 forwarding the generated response to the client.
- 1 25. (New) A system, comprising:
2 a network interface to receive a block-based data access request from a client;
3 the network interface to forward the request to a virtual server;
4 a process to convert the received block-based data access request to a file system
5 data access request;
6 the process to service the file system data access request to generate a response;
7 and
8 the process to forward the generated response to the client.
- 1 26. (New) A computer readable media, comprising:
2 said computer readable media containing instructions for execution on a processor
3 for the practice of a method, the method comprising:
4 receiving a block-based data access request from a client;
5 forwarding the request to a virtual server;
6 converting the received block-based data access request to a file system data ac-
7 cess request;
8 servicing the file system data access request to generate a response; and
9 forwarding the generated response to the client.